



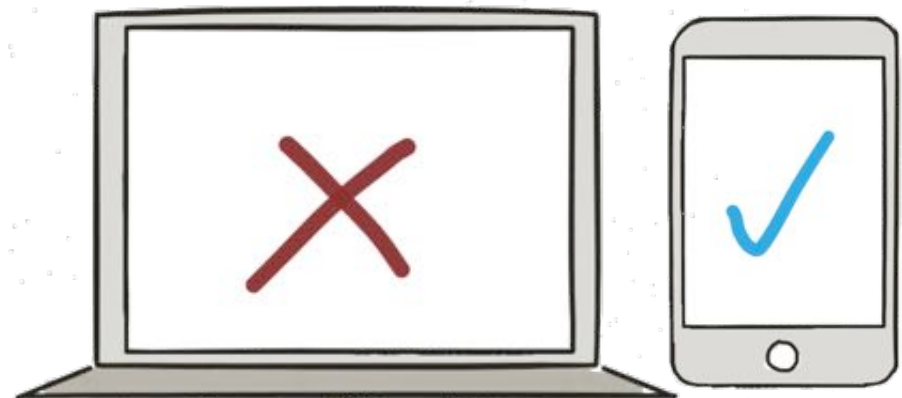
Hot Topics in Human-Computer Interaction

Xiaojuan Ma
Spring 2017




About Topics@HCI

- Instructor
 - Xiaojuan Ma
 - Email: mxj@cse.ust.hk
 - Office: RM3562
- Location
 - CYT G009A
- Time
 - Lecture: Mon Wed 10:30am – 11:50am
 - Office hour: Mon Wed by appointment



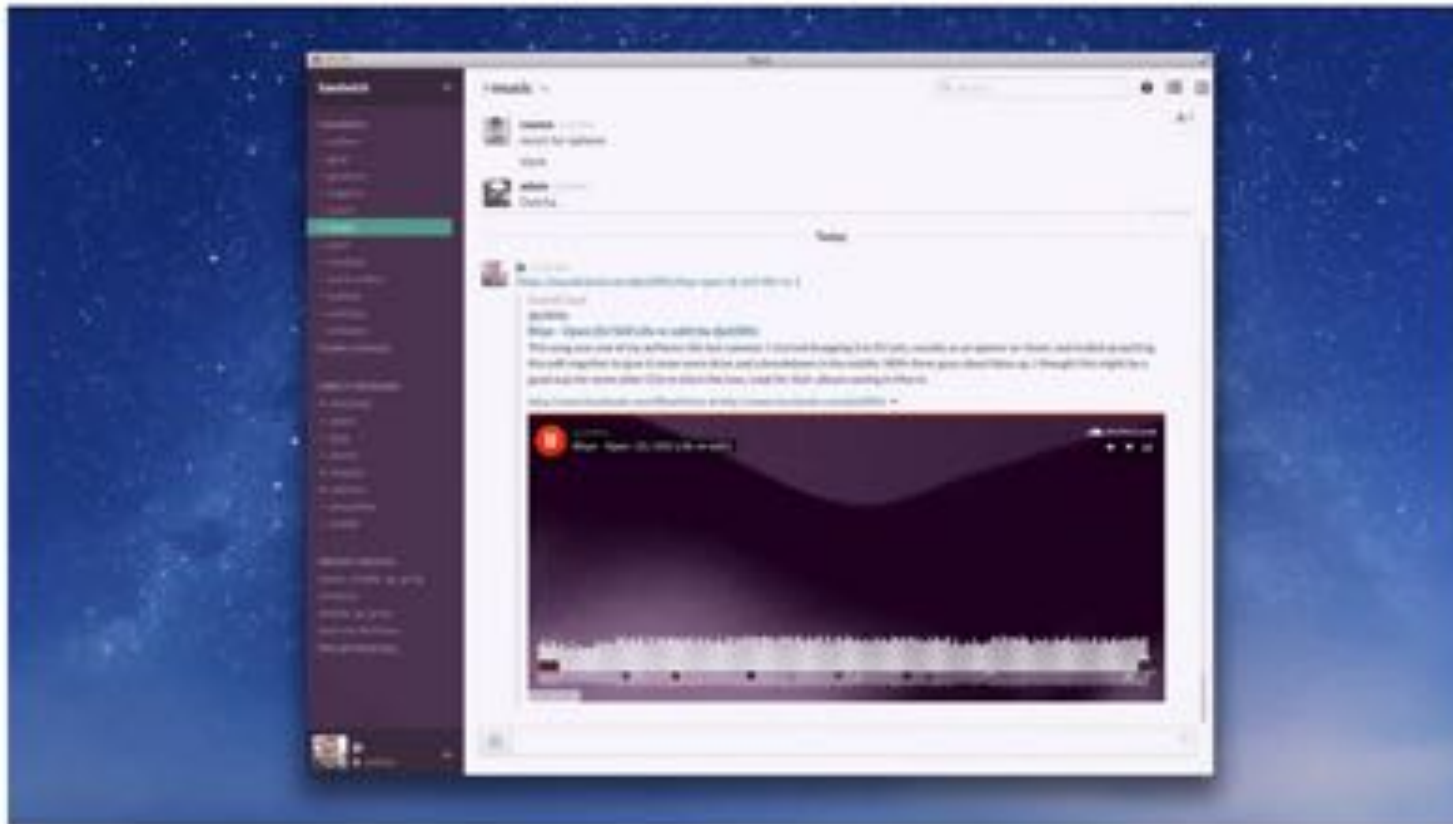


Course Website and Space

- Course website:
<http://home.cse.ust.hk/~mxj/page/COMP6613A-201702.html>
- Team Link: <https://topicsinhci.slack.com/>
- We will use  **slack** for course communication
 - Make course announcement
 - Publish course materials
 - Submit assignments
 - Public discussion
 - Private message
- Give me an email address and I will invite you
 - My Slack Team ID is **xm**

OCT 31, 2014 @ 9:00 PM 8,107 views

Slack Joins The Billion-Dollar Startup Club



<http://www.forbes.com/sites/ellenhuet/2014/10/31/slack-raises-120m-at-1b-valuation/>



Course Learning Outcomes

- **Knowledge/Content Related:**
- **Course ILO #1:** Understanding the basic concepts and methods in HCI research
- **Course ILO #2:** Understanding the foundations and trends of HCI applications

- **Academic Skills/Competencies:**
- **Course ILO #3:** Design an interactive system using various methods through different design activities.
- **Course ILO #4:** Prototype an interactive system with assorted digital and physical tools
- **Course ILO #5:** Evaluate an interactive system through user studies.

- **Other Learning Outcomes:**
- **Course ILO #6:** Communicate effectively with target users and different stakeholders in academia and industry



Grading Scheme

- Reading List & Note: $15\% = 10 + 5$
- In-class presentation: $30\% = 15 \times 2$
- In-class debate: $25\% = 10 \times 2 + 5$
- Final video paper: 20%
- Participation + Bonus: 10%



Course Learning Outcome

- Lecture, Reading Note & Video Paper
 - Understand the basic concepts and methods in HCI
 - Understand the foundations and trends of HCI applications
- Lecture, Exercise, Reading Note & Video Paper
 - Learn to identify user needs, abilities, and constraints
 - Learn to design, prototype, and evaluate HCI technologies
- Lecture, Debate, Presentation & Video Paper
 - Analyze potential social impact and responsibilities as well as possible ethical, legal, security and privacy issues
- Debate, Presentation & Video Paper
 - Communicate effectively with target users and different stakeholders in academia and industry



(1) Reading List & Note 15%

- A recommended reading list (10%) by **Feb 22**
 - Provide a shared reading list of 8 papers Recommend 2 papers for each of the following topics:
 - Interaction everywhere
 - Interaction for people with special needs
 - Interaction beyond the individual
 - Interaction in the new paradigm
 - A 150 word preface + full ref + URL for each paper
- A full review of 1 selected paper (5%) by **Mar 20**
 - Contribution, idea, method, insight, communication
 - ≥ 600 words



Reading List

- Preface (word limit ≤ 150)
 - Not abstract, but your reasons for recommendation
- Full Reference (ACM format)
 - See next page
- URL (where to download the pdf version)
 - E.g., ACM digital library (<http://dl.acm.org/>)



Scope of Topics

- Interaction everywhere
 - New modality, mobile, sensing & data, IoT, etc.
- Interaction for special needs
 - Special users, e.g., children, elderly, disabilities
 - Special domain, e.g., developing country, education, transportation, sustainability, creativity, security, etc.
- Interaction beyond the individual
 - Groupware, social computing, crowd computing, etc.
- Interaction in the new paradigm
 - Robot & AI, VR / AR, etc.



(1) Reading Note 15%

- Possible sources
 - Conference: CHI, UIST, CSCW, MobileCHI, DIS, etc.
 - Journal: TOCHI, HCI, IJHCS, IJHCI, IwC, etc.
- Late policy
 - Up to 3 days in total
 - Available only by request in advance through email or private message on Slack
 - No credit otherwise



(2) In-Class Presentation 30%

- Each of you will give two talks on different topics
 - A “conference-style” talk of assigned reading digest
 - A “Ted-style” talk of technology digest
- No need to submit reading notes on the presentation topics – 3 points for free
- Grading rubrics
 - 12 points per presentation, 2 points each for:
Comprehension, recall, Q&A | slides, manner, time
 - Rate by the audience: 1 pt: $> 1/2$; 2pt: $> 2/3$





(3) In-Class Debate 25%

- Divide into three groups
- Participate in two debates
 - Draw topic, draw side, draw order
 - Opening statement + Q&A + closing statement
- Judge one debate
 - Ask questions
 - Rate each person on: view point, evidence, presentation
- Dates: Feb 22, March 20, April 10



https://en.wikipedia.org/wiki/United_States_presidential_debates



(4) Final Video Paper 20%

- Submit a long video to Chinese CHI Video Contest
 - <http://chchi2017.icachi.org/node/4#video>
- Theme “Ecological HCI”
- Length: 2~5 min (2 people if > 3 min)
- Key Dates
 - Submission of video: April 10, 2017
 - In-class video showcase: April 8, 2017
 - Notification of acceptance: May 10, 2017
 - Cameral-ready : May 25, 2017



(4) Final Video Paper 20%

- Video Showcase
 - Judged by Chinese CHI Video Contest panel
 - Reviews + best video award
 - Screening on May 8
 - Audience's Choice
 - Most educational video (intellectually and/or socially)
 - Most innovation video (concept and/or application)
 - Most entertaining video (story and/or presentation)



(5) Participation + Bonus 10%

- Semi-flip classroom
 - A “taste of HCI” exercise: design, prototyping, etc.
 - A game / exercise related to the topic of the section
- Attendance + Activeness
 - Bring a pen/pencil and a deck of paper
 - 1 bonus point for answering a question, etc.
 - > 6 bonus points can be used to trade reading note(s)

Course Learning Outcome	Exemplary	Competent	Needs Work	Unsatisfactory
Understanding the basic concepts and methods in HCI research	Define and clarify the basic HCI concepts and methodologies, and provide proper examples for demonstration	Define and clarify the basic HCI concepts and methodologies.	Define the basic terminologies and methodologies in HCI research, have difficulty in clarifying the details, conditions, and contexts.	Have difficulty in explaining the basic concepts and processes of common design / prototyping / evaluation methods in HCI research
Understanding the foundations and trends of HCI applications	Elicit the history of HCI applications, the key changes, and driving forces, clarify the major challenges and future directions	Elicit the history of HCI applications, and explain the key changes and driving forces	Elicit the history of HCI applications, have difficulty in explaining the key changes and driving forces	Have difficulty in identifying the core values, scopes, challenges, and trends in HCI applications
Design an interactive system using various methods through different design activities	Conduct common design activities such as needfinding, make good use of design tools such as mindmap, and generate clear design insights	Conduct common design activities such as needfinding and make good use of design tools such as mindmap	Conduct common design activities such as needfinding and brainstorming, have difficulty in using design tools such as mindmap	Have difficulty in conducting common activities such as needfinding and brainstorming in design process to generate design ideas

Prototype an interactive system with assorted digital and physical tools	Conduct common prototyping activities, make good use of various prototyping tools, and generate prototypes at different fidelities	Conduct common prototyping activities and make good use of various prototyping tools	Conduct common prototyping activities, have difficulty in using various prototyping tools	Have difficulty in conducting common prototyping activities and using various prototyping tools
Evaluate an interactive system through user studies	Design and conduct user studies and data analysis, make good use of various prototyping tools, and generate good design implications	Design and conduct user studies and data analysis, and make good use of various prototyping tools	Design and conduct user study and data analysis, have difficulty in using various evaluation tools	Have difficulty in designing user studies and conducting data analysis
An ability to communicate effectively with target users and different stakeholders in academia and industry	Explain HCI designs / applications to a general audience and handle questions, and make good use of multimedia	Explain HCI designs / applications to a general audience and handle questions	Explain HCI designs / applications to a general audience, have difficulty in handling questions	Have difficulty in explaining HCI designs / applications to a general audience



Booklist (not required)

- Alan Dix, Janet Finlay, Gregory Abowd & Russell Beale. *Human-Computer Interaction* (3rd Edition). Prentice Hall, 2004. ISBN 0-13-046109-1.
- Yvonne Rogers, Heken Sharp, & Jenny Preece. *Interaction Design: Beyond Human-Computer Interaction* (3rd Edition). John Wiley & Sons, Inc, 2011. ISBN 0-470-66576-9, 978-0-470-66576-3.
- Donald A. Norman. *The Design of Everyday Things*. Basic Books, 2002.



Learning Aims



Conscious



Critical



Creative



Work for Today

- Join Slack and play with it
- Sign up for “conference” & “Ted” talks in Doodle
 - Deadline: **Wednesday, February 20, 2017**
 - Post your top 3 choices of topics
 - First come first serve



Questions?

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